Saskatchewan - Dept. Repts.

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Saskatchewan
Science Council

# Science Council
# Annual Report, 1981 - 82

# Annual Report of the Saskatchewan Science Council

*For the period April 1, 1981 through March 31, 1982.*

To the Honourable G. Irwin McIntosh
Lieutenant Governor of the Province of Saskatchewan

Sir;
I have the honour to transmit herewith the Annual Report of the Saskatchewan Science Council for the year ending March 31, 1982.

Respectfully submitted,

**The Honourable Gordon Currie**
Minister of Continuing Education

Regina
July 1, 1982

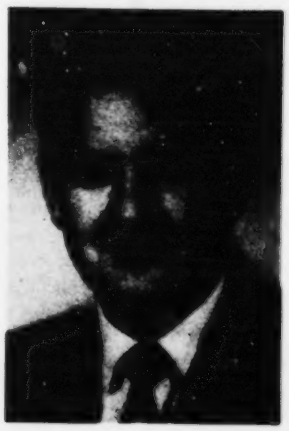
To the Honourable Gordon Currie
Minister of Continuing Education

Sir;
I have the honour to submit for your consideration the Annual Report of the Saskatchewan Science Council for the year ending March 31, 1982.

Respectfully submitted,

**Dr. P.N. Nikiforuk,**
Chairman

Regina
July 1, 1982



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# Science Council Members, 1981-82

**Chairman**
**Dr. P.N. Nikiforuk**
Dean, College of Engineering
University of Saskatchewan
Saskatoon

**Mr. Dexter Beach**
Farmer,
Nipawin

**Dr. J.M. Bell**
Professor, College of Agriculture
University of Saskatchewan
Saskatoon

**Dr. C.W. Blachford**
Dean, Faculty of
Graduate Studies and Research
University of Regina
Regina

**Mr. D. Byers**
Energy and Chemical Workers
Saskatchewan Federation of Labour
Regina

**Dr. W.G.E. Caldwell**
Head, Department of Geological Science
University of Saskatchewan
Saskatoon

**Mr. E.B. Campbell**
Deputy General Manager
Saskatchewan Power Corporation
Regina

**Mr. Jim Hutch**
Manager, Industrial Division
Saskmont Engineering
Saskatoon

**Dr. M. Evelyn Jonescu**
Director
Canadian Plains Research Centre
Regina

**Ms. V. Lynne Pearson**
Deputy Minister
Saskatchewan Consumer and
Commercial Affairs
Regina

**Dr. Tom Pepper**
Executive Director
Saskatchewan Research Council
Saskatoon

**Dr. Menna Weese**
Energy Policy Advisor
Saskatchewan Mineral Resources
Regina

# Chairman's Message

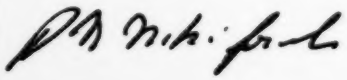
The past year has been a busy but difficult year for the Saskatchewan Science Council. Council accepted the principles outlined in the Pratt Report and launched a very active work program which it feels will be beneficial to the people and government of Saskatchewan. As well, a number of technically competent individuals were appointed to the Council in 1981-82.

However, as a result of receiving very limited funding from the provincial government, the activities of the Council were severely curtailed in 1981-82. Only a few of the planned undertakings were actually accomplished and additional initiatives were delayed.

The forthcoming year should present significant opportunities to the Council for increased involvement in science-related affairs, as a renewed province-wide interest in science and scientific research will place many new challenges before it. The Council will also seek to strengthen its relationship with the provincial government.

Several members of Council retired during the past year and their contribution to the Saskatchewan Science Council is gratefully acknowledged.

The Council extends its appreciation to Dr. A.J.Y. Guy and Mr. Dale Butler of the provincial Office of Science and Technology Policy for their assistance in 1981 and 1982.



Dr. P.N. Nikiforuk

# Purpose and Duties

The Saskatchewan Science Council was established by The *Science Council Act*, proclaimed on April 11, 1975, for the purpose of acquiring, developing and disseminating scientific and technological knowledge in order to promote the industrial, economic, and social development of the province. The duties of the Saskatchewan Science Council are:

(1) to consider all matters brought to its attention by the Minister and where required by the Minister to report its findings to him;

(2) to formulate, for the guidance of the public and the government, science policy for the development and application of scientific and technological information and processes;

(3) to communicate science policy to the government and any other interested persons;

(4) to advise the government on implementation of science policy;

(5) to gather and organize information on the scientific research needed and advise the government and other interested persons on matters related to scientific research;

(6) to facilitate discussions related to science policy with the government of Canada, the government of any province, and any interested person; and

(7) to take whatever action is necessary to carry out the purpose of this *Act*.

# Operating Guidelines

The Saskatchewan Science Council believes that it is a mechanism by means of which the people of Saskatchewan can explore options for the future industrial, economic, and social development of the province. In this regard, the primary contributions of the Council are in the identification of opportunities, options, and problems in the intermediate to long-term future. To achieve these goals, an appropriate series of background studies is required. These studies are now being developed by the Council.

# Summary of Activities, 1981 - 82

The major task that the Saskatchewan Science Council set for itself in early 1981 was to develop an operational work plan which encompasses immediate, intermediate, and long-term objectives and which would achieve a number of specific goals. This plan includes the study of scientific and technical issues of particular concern to the people and government of Saskatchewan and the publication, for their use, of the conclusions of these studies in the form of reports, papers and other material. This plan would also provide the Minister Responsible with a yearly definitive perspective of the Council's activity and publications program.

In the immediate term, the Council proposes to strengthen its role in advising the government and people on provincial issues of science and technology. The Council recommends new initiatives in several areas, including Saskatchewan's scientific heritage, biotechnology, current scientific activities in Saskatchewan and science education. It is anticipated that a number of publications will be prepared from these topics.

The intermediate-term program is to ensure that continued consultation occurs with the government and people. As part of the program, Council will prepare background papers for the Minister dealing with certain aspects of such topics as water, transportation, agriculture, social sciences and humanities, scientific manpower, and federal funding of Saskatchewan research.

A number of important issues are viewed over the long-term by Council as deserving government and public attention. Uranium exploration, water, toxicology, heavy oil, and agricultural land conservation are five issues delineated by Council in 1981-82.

With reference to the planned program of activity, Council believes that there is an urgent need for information on a number of scientific and technical topics that is dispassionate and factual. That the need for such information is vital can be seen from the controversial nature of some of the topics which have recently been debated in the province. At the same time, Council recognizes the need of having such publications aimed not only at those who have to make decisions but also at the broader population. Such publications will have to be written in non-technical language.

Council recognizes that deficiencies in a number of areas such as agriculture, water quality or quantity, and transportation can limit provincial physical and economic growth. Council hopes not only to alert the people and government of Saskatchewan to the potential consequences, but to offer possible solutions as well.

Beyond 1982, a great deal of Council's attention and publication efforts will be

devoted to issues relating to science education and research programs within this province. As a long-term objective, Council recommends an investigation into the social costs and benefits of Saskatchewan's scientific investment. The universities in Saskatchewan are singularly underfunded for social sciences and humanities research. During 1979-80, slightly less that one percent of the Social Sciences and Humanities Research Council of Canada awards were made to Saskatchewan scholars.

Council maintains that the increased recognition of the scientific and technical achievements and benefits by Saskatchewan researchers is of prime importance. The work of Dr. T.T. Thorvaldson on sulphate resistant cement and that of the Veterinary Infectious Diseases Organization on Vicogen are but two noteworthy examples of such research which must be more broadly recognized.

Seven sub-committees on issues in science and technology were established in February, 1982. Chaired by Council members, these sub-committees included transportation, water, uranium, science education, science and technology in Saskatchewan, natural resources, and agriculture. These sub-committees met regularly in 1982 and each initiated efforts toward tangible achievements over the next two years.

Council received and accepted a commissioned report by professors W. Brown and R. C. Strayer of the University of Saskatchewan. The report is entitled; "Purchasing Farm Machinery: A Summary of Responses from Farmers, Agricultural Representatives, and Farm Machinery Dealers".

In the spring of 1982, Council held a special meeting in Regina devoted to science education and school curriculums. Dr. Graham Orpwood, Dr. B. W. Robertson and Mrs. Isme Alam of the Science Council of Canada and Dr. Tom Hart of the University of Regina attended the meeting.

Dr. Orpwood addressed the Council on the progress of the Science Council of Canada study into our national commitment to science education. Dr. Orpwood outlined the current state of science teaching in Canadian schools and future directions that need to be undertaken for science education. He is also preparing an historical analysis of science teaching in Canada.

The Saskatchewan Science Council is interested in science education in Saskatchewan and, in conjunction with Dr. Hart, is laying the groundwork for a provincial survey of high school science curriculums. The Saskatchewan Science Council is very concerned at the declining enrolments in Saskatchewan high schools in the natural sciences and mathematics. The long-term growth of Saskatchewan's economy will be weakened by an inability to produce skilled scientific manpower. In addition, the universities in this province will have difficulty attracting qualified scientists.

The work plan for the Saskatchewan Science Council will be particularly demanding on its members over the next three years. The effort, however, will be rewarded by assuring results which benefit the citizens of Saskatchewan, provide valuable science policy advice to the government and people, and assure financial stability for the Council. Council's guide in implementing this work plan is "performance". The programs are realistic and allow Council to work to ensure that its program objectives are achieved.

# Statement of Expenditure

| Science Council | 1980-81 | 1981-82 |
|---|---|---|
| Printing and Special Services | $1,710.00 | — |
| Honoraria | 200.00 | 1,725.00 |
| Travel and Sustenance | 106.00 | 1,085.69 |
| Education and Health Tax | 85.50 | — |
| **Total** | **$2,101.50** | **$2,810.69** |